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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,010	02/07/2001	Keith R. Slavin	500841.01	5613

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SEATTLE, WA 98101

EXAMINER

SAJOUS, WESNER

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/779,010

Applicant(s)

SLAVIN, KEITH R.

Examiner

Sajous Wesner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-28 is/are allowed.
- 6) ☒ Claim(s) 1-23 and 29-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to: See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4-5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "cosited" in claims 1-15 is a relative term which renders the claim indefinite. The term "cosited" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. There is no accepted meaning in the dictionary for this term. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term is indefinite because the specification does not clearly redefine the term.

3. Claims 16-23, 29-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "the sample values of the previous and first pixels" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim because no sample values of previous and first pixels are defined by the claim.

Claim 29 recites the limitation "the sample value of the subsequent and second samples" in line 11. There is insufficient antecedent basis for this limitation in the claim because no sample values of previous and first pixels are defined by the claim.

Claim 34 recites the limitation "the sample value of the subsequent and second samples" in line 17. There is insufficient antecedent basis for this limitation in the claim because no sample values of previous and first pixels are defined by the claim.

Claims 17-23, 30-33 and 35-38 contain the same problem of claims 16, 29, and 34, by dependence, they are therefore rejected under the same rationale as claims 16, 29, and 34, respectively.

#### ***Allowable Subject Matter***

4. Claims 1-23 and 29-38 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action, because the prior art of record, particularly, the Jensen (US 5930407) fail to teach approximating first and second sample (or color) gradients at the first and second samples (or color) based on a multiple of the first and second sample (or color) slopes, all respectively, solving coefficients for a cubic polynomial transition model between the first and second adjacent samples from the sample values of the first and second samples and the approximations of the first and second sample (or color) gradients and

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determining an output sample value from the cubic model to render a resampled destination image (as recited in claims 16, 29 and 34).

5. Claims 24-28 are allowed because the prior art fail to teach a means for calculating a third sample slope between the sample values of the first and second samples; a means for approximating first and second sample gradients at the first and second sample positions, the approximation of the first sample gradient based on a multiple of the first or third sample slopes and the approximation of the second sample gradient based on a multiple of the second or third sample slopes; a means for solving coefficients for a cubic polynomial transition model between the first and second adjacent samples from the sample values of the first and second samples and the approximations of the first and second sample gradients; and a means for determining an output sample value from the cubic model to render a resampled destination image.

Jensen discloses generating a pixel values in a destination image from a source image by interpolating between horizontally aligned neighbor pixels in the source image. Jensen further performs cubic interpolation using distances between a first resampled point and other neighbor pixels in a same row so as to arrive at an intermediate pixel value and reduce the number of mathematical operations that are required to generate coefficients. This in turn reduces the number of hardware required and increases the speed of the interpolator (see col. 2, lines 15-55). However, Jensen fail to teach the aforementioned features in the manner recited in the claims.

### **Conclusion**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajous Wesner whose telephone number is 571-272-7791. The examiner can normally be reached on M-T, first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) and 703-305-3028. The USPTO contact Center phone numbers are 800-PTO-9199 and 703-308-4357.

*Wesner Sajous - WOS*



3/15/05



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